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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/513,043	02/25/2000	Philip Gilchrist	CE03599RP01	6989

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EXAMINER

KWOH, JASPER C

ART UNIT	PAPER NUMBER
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2663

DATE MAILED: 06/26/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/513,043

Applicant(s)

GILCHRIST ET AL.

Examiner

Jasper Kwoh

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— The MAILING DATE of this communication appears on the cover sheet with the correspondence address —

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 25 February 2000.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-12 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-12 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 25 February 2000 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☒ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 2.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

**DETAILED ACTION*****Priority***

1. If applicant desires priority under 35 U.S.C. section 120 based upon a previously filed application, specific reference to the earlier filed application must be made in the instant application. For benefit claims under 35 U.S.C. 120, 121 or 365(c), the reference must include the relationship (i.e., continuation, divisional, or continuation-in-part) of the applications. This should appear as the first sentence of the specification following the title, preferably as a separate paragraph unless it appears in an application data sheet. The status of nonprovisional parent application(s) (whether patented or abandoned) should also be included. If a parent application has become a patent, the expression "now Patent No. \_\_\_\_" should follow the filing date of the parent application. If a parent application has become abandoned, the expression "now abandoned" should follow the filing date of the parent application.

If the application is a utility or plant application filed under 35 U.S.C. 111(a) on or after November 29, 2000, the specific reference must be submitted during the pendency of the application and within the later of four months from the actual filing date of the application or sixteen months from the filing date of the prior application. If the application is a utility or plant application which entered the national stage from an international application filed on or after November 29, 2000, after compliance with 35 U.S.C. 371, the specific reference must be submitted during the pendency of the application and within the later of four months from the date on which the national stage commenced under 35

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U.S.C. 371(b) or (f) or sixteen months from the filing date of the prior application. See 37 CFR 1.78(a)(2)(ii) and (a)(5)(ii). This time period is not extendable and a failure to submit the reference required by 35 U.S.C. 119(e) and/or 120, where applicable, within this time period is considered a waiver of any benefit of such prior application(s) under 35 U.S.C. 119(e), 120, 121 and 365(c). A priority claim filed after the required time period may be accepted if it is accompanied by a grantable petition to accept an unintentionally delayed claim for priority under 35 U.S.C. 119(e), 120, 121 and 365(c). The petition must be accompanied by (1) the reference required by 35 U.S.C. 120 or 119(e) and 37 CFR 1.78(a)(2) or (a)(5) to the prior application (unless previously submitted), (2) a surcharge under 37 CFR 1.17(t), and (3) a statement that the entire delay between the date the claim was due under 37 CFR 1.78(a)(2) or (a)(5) and the date the claim was filed was unintentional. The Director may require additional information where there is a question whether the delay was unintentional. The petition should be addressed to: Mail Stop Petition, Commissioner for Patents, P.O. Box 1450, Alexandria, Virginia 22313-1450.

### ***Drawings***

2. The drawings are objected to because fig. 3, fig. 4 and fig. 8 include black blocks which do not correspond to well known graphical representations, applicant is required to provide suitable legend under 37 C.F.R. 1.83 (a) and 1.84 (o). A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

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3. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the transferring routing function from the BSS to a second BSS, and transmitting billing and statistics from BSS to the packet data gateway must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

#### ***Claim Objections***

Applicant skipped claim 3 when numbering the claims of the originally filed application. Misnumbered claims 4-13 has been renumbered 3-12.

#### ***Specification***

4. The disclosure is objected to because of the following informalities: on page 14, line 20, "provides a for routing..." is missing a noun.

Appropriate correction is required.

#### ***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that

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the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary.

Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

7. Claims 1-4, 6-10 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Perkins in view of Chambers.

Regarding claim 1, Perkins discloses a method comprising: determining that a first remote unit needs to communicate with a second remote unit, wherein the first remote unit is a mobile unit (i.e. col. 7, ll. 54-56, mobile unit delivers packets to remote user); transferring a routing function from a packet data gateway to a base station system so that data can be routed from the first remote unit to the second remote unit via the BSS without routing the data through the packet data gateway (i.e. col. 8, ll. 17-19, routing of the packets are achieved without the intervention of the global gateway 18). Perkins does not specifically disclose that the second remote unit is located within the local network.

However, Chambers teaches that determining the availability of the second remote unit within a local network, wherein the first remote unit is part of the local network and based on that determine local routing (i.e. col. 4, ll. 61-64, when the data pattern of the links are the same, then the system knows the two mobile units are located in the same local network and local routing is possible).

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Therefore, if two mobile units of Perkins wants to communicated, it would have been obvious to include local routing as taught by Chambers with the method of pseudo-IP addressing and route only using the local gateway 16 and bypassing the global gateway 18. The motivation is improve the performance of the network by preventing unnecessary routing by extra network elements.

Regarding claim 2, Perkins discloses transferring the routing function from the BSS to a second BSS (i.e. col. 6, ll. 26-31, when a mobile unit is handed off, the pseudo ID allows the routing to the mobile to travel from the previous local gateway to the new local gateway).

Regarding claims 3-4 and 11, Perkins discloses transferring routing function is done by: based on a request from the first remote unit upon reselection of a cell (i.e. col. 6, ll. 26-31, when a mobile unit is handed off when entering a new cell, the pseudo ID allows the routing to the mobile to travel from the previous local gateway to the new local gateway), or identity of the second remote unit (it is inherent that the routing requires the identity of the second remote unit in order to know where and whom to route the packets to therefore the identity is also required when transferring the routing function).

Regarding claims 6-9, Perkins discloses returning the routing function back to the packet data gateway based on: determining that the first remote unit moved outside of the local area (i.e. col. 39-41, if the mobile leaves the cell and disappears, requesting to return the routing to the packet data gateway (i.e. col. 7, ll. 38-40, routing function is return to the global gateway), the global gateway stops forwarding therefore routing is returned to the global gateway), based on a

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context modification (i.e. col. 5, ll. 30-34, context is equivalent to address so when the mobile moves to a new cell, the routing function may be switched back to the packet data gateway), based on length of inactivity of the first remote unit (i.e. col. 34-37, being out of touch, the global gateway stops forwarding therefore routing is returned to the global gateway).

Regarding claim 12, Perkins discloses a method comprising: receiving at a base station a context with routing information (i.e. col. 8, ll. 15-16, the remote user sends an pseudo IP address to the local gateway with HS 12); receiving the uplink information from a first remote unit (i.e. col. 8, ll. 17-18, the remote units are communicating); and utilizing the context to route the uplink information to a second remote unit (i.e. col. 8, ll. 15-16, the remote user sends an pseudo IP address to the local gateway with HS 12). Perkins does not specifically disclose that the second remote unit is located within the local network so the information bypass elements external to the local network. However, Chambers teaches that determining the availability of the second remote unit within a local network, wherein the first remote unit is part of the local network and based on that determine local routing (i.e. col. 4, ll. 61-64, when the data pattern of the links are the same, then the system knows the two mobile units are located in the same local network and local routing is possible). Therefore, if two mobile units of Perkins wants to communicated, it would have been obvious to include local routing as taught by Chambers with the method of pseudo-IP addressing and route only using the local gateway 16 and bypassing the global gateway 18. The



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motivation is improve the performance of the network by preventing unnecessary routing by extra network elements.

8. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Perkins in view of Chambers.

Perkins does not specifically disclose transmitting billing and statistics from BSS to the packet data gateway. Perkins discloses that control information is transmitted between the BSS and packet data gateway. Official notice is taken that transmission of billing and statistical information between network elements in a telecommunication system is notoriously old and well known. Therefore, it would have been obvious to an ordinary person skilled in the art at the time of the invention to include transmission of billing and statistics with the method of Perkins in order for recover the cost of the usage and make a profit on the network.

9. Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Perkins in view of Chambers further in view of Kimball (US005953322A).

Perkins does not specifically disclose providing interconnection to a circuit switched network. However, Kimball teaches that a packet data communication can be converted to a PSTN call and interconnected to a circuit switched network (i.e. col. 5, ll. 6-10; voice call data packets are recovered according to the protocol of the PSTN which is a circuit switched network). Therefore, it would have been obvious to an ordinary person skilled in the art at the time of the invention to include providing interconnection to a circuit switched network as

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taught by Kimball with the method of perkins in order to increase scalability of the system by allowing the user to communicate of users on the different networks.

***Conclusion***

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- a. Toth et al. is cited to show address a wireless communication system with dynamic assigned address;
- b. Scholefield et al. is cited to show communication ins a wireless system;
- c. Lu et al. is cited to show connecting calls in a hierarchical cellular network;
- d. Hamalainen et al. is cited to show packet data transmission in a mobile communication network;
- e. Josse et al. is cited to show data packet radio service with enhanced mobility management;
- f. Strawczynski et al. is cited to show cellular communication network with vocoder sharing feature;
- g. LaDue is cited to show a TDMA downlink, personal communication system voice and data debit milling method;
- h. Lupien et al is cited to show an integrated radio telecommunications network and method of interworking an ANSI-41 and GPRS; and

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- i. Ronneke is cited to show a collecting per packet billing data in a packet data service.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jasper Kwoh whose telephone number is (703) 305-0101. The examiner can normally be reached on Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chau Nguyen can be reached on (703)308-5340.

The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9314 for regular communications.

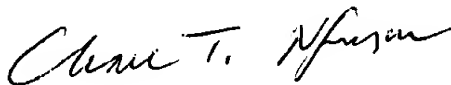
Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703)305-4700.



JK

June 20, 2003

Jasper Kwoh  
Examiner  
Art Unit 2663



CHAU NGUYEN  
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